

REMARKS

Entry of the present amendment and reconsideration of the present application is respectfully requested. All the rejections are traversed and a prompt notice of allowance is respectfully requested.

Claims 1 and 11 have been amended to read “tie bar” rather than “tie rod.” The purpose of this amendment is to be consistent with the language used in the specification. Withdrawal of the objection to the specification is requested. Claims 1-2 and 4-11 have also been amended to improve clarity and readability, with claim 10 being rewritten as a dependent claim. Claims 15-19 have been canceled and new dependent claims 29-41 have been added. Support for the claim amendments and the new claims can be found throughout the specification and claims as originally filed. (See e.g. FIGS. 2a-2d, FIGS. 10a-10b; Specification page 15, lines 11-25)

Claims 1-13, 15-19 and 27 stand rejected as being anticipated by Davies ‘068 (GB 2268068). These rejections are traversed.

Independent claim 1 specifies a bone nail having multiple expansion portions wherein each expansion portion has different portions with at least one different characteristic. In other words, claim 1 requires variation of a characteristic *within* a single expansion portion, which provides for precise control over the expansion characteristics of individual expansion portions. Davies ‘068 fails to teach the provision of non-uniformity *within* an individual expansion portion, and for at least this reason, the rejection of claim 1 is improper and should be withdrawn.

Davies ‘068 discloses a bone nail comprised of multiple expansion portions 4a and 4b. (see FIG. 3) Each expansion portion 4a, 4b is constructed by forming a plurality of longitudinal slots 12 in a plastic sleeve member 4, and as depicted in Figures 1-4, both the longitudinal slots

12 and the intervening plastic sleeve portions are of uniform thickness and width. (Davies '068, page 6; FIGS. 1-4)

Davies '068 does suggest on page 9 that the deformation characteristics of the expansion devices may be selected to vary “between two or more areas of the bone”. (Davies '068, page 9) However, the “areas of the bone” being referenced correspond to the longitudinally spaced “areas A and B” as shown in FIG. 3 and areas A-D as shown in FIG. 4. (See Davies '068, page 7 line 20-22; page 8 line 26- page 9 line10) Different expansion portions are positioned in different areas of the bone. Accordingly, the cited section of Davies '068 is referring to variations *between* expansion portion 4a (positioned in area A) and expansion portion 4b (positioned in area B), not a variation *within* expansion portions 4a and within expansion portion 4b as specified in claim 1.

Besides the patentability of the base claim, additional reasons support the patentability of various dependent claims from claim 1. For example, new dependent claims 29 further specifies that the variation is with respect to a thickness of the elongate portion measured between an inner and outer surface thereof, for example as shown in FIGS 2a-2d and FIGS. 10a-10b. Applicant has found that providing thickness variation in the radial direction is particularly advantageous when the expansion portions are constructed from metallic material, which have substantially different elasticity and memory residence than do the “stiffly resilient plastics material” disclosed in Davies '068.

Dependent claims 40 and 41 specify that a multiplicity of components are positioned along the tie bar with respective ends of the various components interengaged with each other *and with the opposing portion* such that disengagement of parts is prevented when the compressive force is released. In Davies '068, the opposing portion would be the nut 20 and washer 22, which bear against sleeve 4 to apply the compressive force. (FIG. 3, page 7)

However, because the nut 20 and washer 22 are not interengaged with sleeve 4, the Davies '068 construction is susceptible to disengagement as the compression force is removed.

Independent claim 11, as amended, requires that a profile of the longitudinal portion be narrowed at one or both end portions and that *both ends* of the longitudinal portion be fixed to means which interengage a compression coupling. As noted above, Davies '068 discloses longitudinal portions that are uniform along their length and which are not interengaged with a compression coupling at both of their ends. Accordingly, for at least these reasons, the anticipation rejection of independent claim 11 should also be withdrawn.

Claim 14 stands rejected as under §103(a) as being unpatentable over Davies '068 in view of Gianezio (US 4,520,511). This rejection is also traversed. As noted above, Davies '068 fails to teach variation of a characteristic *within* each of a plurality of expansion portions, and the addition of Gianezio is not seen to cure this deficiency.

Reconsideration of the application, as amended, is respectfully requested. If there are any remaining issues that can be addressed by phone or otherwise, the Examiner is invited to contact the undersigned directly.

Respectfully submitted,

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